AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A wireless LAN communication system using a CSMA method, comprising:

a base station; and

plural terminals, ~~the wireless LAN communication system being characterized in that~~wherein the base station comprises:

~~a~~data classification means for classifying data to be transmitted to the terminals into audio data and terminal-basis ordinary data and generating downstream data communication traffic information~~;~~,

~~a~~queuing means for generating an ordinary data transmission queue and an audio data transmission queue by queuing the data classified by the data classification means~~;~~,

~~a~~communication quality control parameter setting means for setting communication quality control parameters respectively for the ordinary data transmission queue and the audio data transmission queue~~;~~,

a transmission and reception portion for transmitting data from the ordinary data transmission queue and from the audio data transmission queue according to the communication quality control parameters at a time of transmission~~;~~,

~~a~~reception data detection means for acquiring upstream communication traffic information from reception data received from each of the terminals~~;~~, and

~~a~~communication quality control parameter control means for dynamically adjusting each of the communication quality control parameters in the communication quality control parameter setting means, based on the downstream and upstream communication traffic information.

2. (Currently Amended) The wireless LAN communication system according to claim 1, ~~characterized by~~ further comprising ~~a~~queuing weighting control means for controlling ~~a weight~~weighting in queuing ~~performed~~ by the queuing means, based on the downstream and upstream communication traffic information.

3. (Currently Amended) The wireless LAN communication system according to claim 1, ~~characterized in that~~wherein the queuing means limits ~~a~~length of a queue for each of the terminals and discards data overflowing the queue.

4. (Currently Amended) The wireless LAN communication system according to claim 1, ~~characterized in that~~wherein:

the base station further comprises ~~a~~terminal communication quality control parameter control means for periodically generating, for each of the terminals, a beacon for adjusting the communication quality control parameters for data transmission in each of the terminals, based on the downstream and upstream communication traffic information; and

at least one of the terminals comprises:

~~a~~classification means for classifying data to be transmitted to the base station into audio data and ordinary data~~;~~,

~~a~~communication quality control parameter setting means for setting communication quality control parameters respectively for the audio data and the ordinary data, the communication quality control parameters being respectively and dynamically adjusted ~~by~~through the beacon~~;~~, and

a transmission and reception portion for transmitting the ordinary data and the audio data based on the communication quality control parameters at the time of transmission.

5. (Currently Amended) The wireless LAN communication system according to claim 4, ~~characterized in that~~wherein the communication quality control parameter control means and the terminal communication quality control parameter control means ~~a~~of the at least one terminal control delay time and ~~a~~priority of the communication quality control parameters for the audio data always to be ~~always~~shortest and highest, respectively.

6. (Currently Amended) The wireless LAN communication system according to claim 4, ~~characterized in that~~wherein

the base station further comprises ~~a~~communication control means for creating an active terminal count table, which shows ~~a~~transmission and reception state at each of the terminals, based on the downstream and upstream communication traffic information~~;~~, and

the communication quality control parameter control means and the terminal communication quality control parameter control means control the communication quality control parameters for downstream and upstream transmission, based on the active terminal count table, such that downstream and upstream ~~ratio in~~communications ~~is~~are equal.

7. (Currently Amended) The wireless LAN communication system according to claim 6, ~~characterized in that~~wherein:

the base station further comprises a transmission rate coefficient table which shows predetermined transmission rate coefficients for transmission rates to equalize a transmission time in communications~~;~~, and

the transmission rate coefficients are taken into consideration when the communication quality control parameter control means and the terminal communication quality control parameter control means control the communication quality control parameters.

8. (Currently Amended) The wireless LAN communication system according to claim 6, ~~characterized by~~ further comprising ~~a~~ queuing weighting control means for controlling ~~a weight~~weighting in queuing ~~performed~~ by the queuing means, based on the downstream and upstream communication traffic information, ~~characterized in that~~wherein, ~~with~~in response to an instruction from an upper side of the base station, the terminal communication quality control parameter control means controls the communication quality control parameter control means in a terminal ~~by~~through the beacon, and the queuing weighting control means controls ~~a weight~~weighting in queuing ~~performed~~ by the queuing means to control communication traffic to a particular terminal.

9. (Currently Amended) The wireless LAN communication system according to claim 4, ~~characterized in that~~wherein the beacon generated by the terminal communication quality control parameter control means includes information for making a terminal ~~which is not provided with the terminal~~not including a communication quality control parameter control means incapable of transmitting data for a ~~given~~ period of time in a beacon period.